

CLAIMS

What is claimed is:

5 1. A method of suppressing a respiratory syncytial virus (RSV) infection in
an individual who has been exposed to RSV, comprising administering a composition
comprising a polynucleotide comprising an immunostimulatory sequence (ISS) to
said individual, wherein the ISS comprises the sequence 5'-C, G-3', wherein an RSV
antigen is not administered in conjunction with administration of said composition,
and wherein said composition is administered in an amount sufficient to suppress a
10 RSV infection.

2. The method of claim 1, wherein the ISS comprises the sequence 5'-T, C,
G-3'.

3. The method of claim 1, wherein the ISS comprises the sequence 5'-purine,
purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine,
15 pyrimidine, C, C-3'.

4. The method of claim 3, wherein the ISS comprises a sequence selected
from the group consisting of 5'-AACGTTCC-3', 5'-AACGTTTCG-3', 5'-
GACGTTCC-3', and 5'-GACGTTTCG-3'.

5. The method of claim 1, wherein the ISS comprises the sequence
20 5'-TGACTGTGAACGTTTCGAGATGA-3' (SEQ ID NO:1).

6. The method of claim 1, wherein the individual is a mammal.

7. The method of claim 1, wherein administration is at a site of exposure.

8. The method of claim 7, wherein the site of exposure is respiratory mucosa.

9. The method of claim 7, wherein the site of exposure is the nasal passages.

10. The method of claim 1, wherein the suppression comprises a reduction of RSV titer in a biological sample from said individual.

11. A kit for use in suppressing a respiratory syncytial virus (RSV) infection in an individual infected with or exposed to RSV, comprising:

5 a composition comprising a polynucleotide comprising an immunostimulatory sequence (ISS), wherein the ISS comprises the sequence 5'-C, G-3' and wherein said kit does not comprises an RSV antigen; and

instructions for administration of said composition to an individual infected with or exposed to RSV to suppress RSV infection.

10 12. The kit of claim 11, wherein the ISS comprises the sequence 5'-T, C, G-3'.

13. The kit of claim 11, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

15 14. The kit of claim 13, wherein the ISS comprises a sequence selected from the group consisting of 5'-AACGTTCC-3', 5'-AACGTTTCG-3', 5'-GACGTTCC-3' and 5'-GACGTTTCG-3'.

15. The kit of claim 11, wherein the ISS comprises the sequence 5'-TGA CTGTGAACGTTTCGAGATGA-3' (SEQ ID NO:1).